STATE OF UTAH

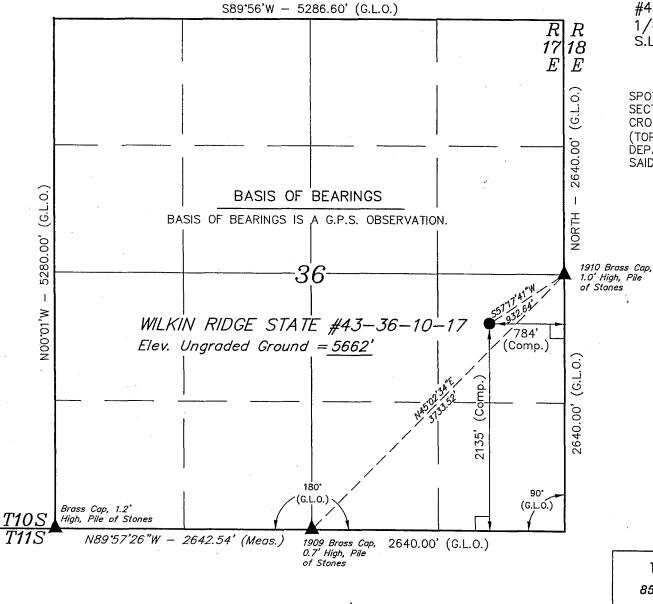
DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

AMENDED REPORT	
(highlight changes)	

DIV. OF OIL, GAS & MINING

APPLICATION FOR PERMIT TO DRILL 5. MINERAL LEASE MI. 47067	NO.: 6. SURFACE: State		
1A. TYPE OF WORK: DRILL ☑ REENTER □ DEEPEN □ 7. IF INDIAN, ALLOT	TEE OR TRIBE NAME:		
N/A			
B. TYPE OF WELL: OIL GAS X OTHER SINGLE ZONE MULTIPLE ZONE S. UNIT OF CA AGRE			
Wilkin Ridge 2. NAME OF OPERATOR: 9. WELL NAME and			
	e State #43-36-10-17		
3. ADDRESS OF OPERATOR: PHONE NUMBER: 10. FIELD AND POO			
8 Inverness Drive East, Suite 100, Englewood, CO 80112 303-483-0044 Wildcat			
584973X 4476×844 3389977 MERIDIAN:	TION, TOWNSHIP, RANGE		
AT SURFACE: 2135' FSL and 784' FEL (100 aug 57) Section 36.	T10S-R17E		
AT PROPOSED PRODUCING ZONE: NE SE			
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 12. COUNTY:	13. STATE:		
Approximately 28.7 miles south of Myton, UT	UT		
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) 16. NUMBER OF ACRES IN LEASE: 17. NUMBER OF ACRES AS:			
784' 640 40 acr 18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR 19. PROPOSED DEPTH: 20. BOND DESCRIPTION:	res: NE SE		
APPLIED FOR) ON THIS LEASE (FEET):	and No. 4107762		
None 12.150' Statewide B 21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 22. APPROXIMATE DATE WORK WILL START: 23. ESTIMATED DURATION:	Statewide Bond No. 4127763 ESTIMATED DURATION:		
5662' GL ASAP 35	5 Days		
PROPOSED CASING AND CEMENTING PROGRAM			
SIZE OF HOLE CASING SIZE, GRADE, AND WEIGHT PER FOOT SETTING DEPTH CEMENT TYPE, QUANTITY, YIELD, AND SLUR	RRY WEIGHT		
17-1/2" 13-3/8", H-40, 48# 170' To surface with Redi-Mi			
12-1/4" 9-5/8", J-55, 32# 2,788' 434 sx Hi-Lift, 11.0 ppg, 3.91 yield + 185 sx 10-2			
7-7/8" 4-1/2", P-110,13.5# 12,150' 575 sx Hi-Lift 11.5 pgg, 3.05 yield + 1034 sx 50/50 F	Poz G, 14.1 ppg, 1.28 yield		
25. ATTACHMENTS			
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:			
WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER COMPLETE DRILLING PLAN			
EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER	HER THAN THE LEASE OWNER		
AGENT: PermitCo Inc., 14421 County Road 10, Fort Lupton, CO 80621 AGENT'S PHON			
NAME (PLEASE PRINT) Venessa Langmacher TITLE Agent for Gasco Produc	tion Company		
SIGNATURE November 30, 2007			
(This space for State use only) Approved by the			
Utah Division of			
API NUMBER ASSIGNED: 43-047-34796 OII, Gas.and Mining	RECEIVED 3		
	LOLIVLD 🦼		
	DEC 0 3 2007		

T10S, R17E, S.L.B.&M.



LEGEND:

= 90° SYMBOL

= PROPOSED WELL HEAD.

= SECTION CORNERS LOCATED.

(AUTONOMOUS NAD 83)

LATITUDE = 39'53'56.81" (39.899114) LONGITUDE = 109'56'53.65" (109.948236)

(AUTONOMOUS NAD 27)

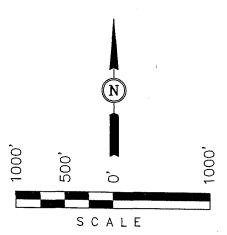
LATITUDE = 39.53.56.94" (39.899150) LONGITUDE = 109.56.51.12" (109.947533)

GASCO PRODUCTION COMPANY

Well Location, WILKIN RIDGE STATE #43-36-10-17, located as shown in the NE 1/4 SE 1/4 of Section 36, T10S, R17E, S.L.B.&M. Uintah County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION AT THE NORTHEAST CORNER OF SECTION 1, T11S, R17E, S.L.B.&M. TAKEN FROM THE CROW KNOLL, QUADRANGLE, UTAH, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5695 FEET.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS BREFARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BOME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELLER

REGISTERED LAND SURVEYOR REGISTRATION NO. 161319 STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING 85 SOUTH 200 EAST - VERNAL, UTAH 84078

(435) 789–1017

SCALE	DATE SURVEYED:	DATE DRAWN:		
1" = 1000'	8-31-04	9-2-04		
PARTY	REFERENCES			
S.H. L.M. C.G.	G.L.O. PLAT			
WEATHER	FILE			
WARM	GASCO PRODU	CTION COMPANY		



14421 County Rd. 10 • Ft. Lupton, Colorado 80621 • (303) 857-9999 • FAX (303) 857-0577 • E-MAIL Permitco 1@aol.com

November 30, 2007

Division of Oil, Gas & Mining 1594 West North Temple, Suite 1210 Box 145801 Salt Lake City, UT 84114-5801 Attn: Minerals

Re:

Gasco Production Company Willikin Ridge State #43-36-10-17 2135' FSL and 784' FEL NE SE Section 36, T10S-R17E Uintah, Utah

Gentlemen:

Enclosed please find one copy of the Application for Permit to Drill, along with one copy of the Onshore Order No. 1 which was filed with the BLM in Vernal, Utah.

If you should need additional information, please don't hesitate to contact me.

Sincerely,

PERMITCO INC.

Venessa Langmacher Consultant for

Gasco Production Company

Veneusa Sangmacher

Enc.

CC:

Gasco Production Company - Englewood, CO

Shawn Elworthy - Myton, UT Shon McKinnon - Altamont, UT

RECEIVED

DEC 0 3 2007

DIV. OF OIL, GAS & MINING

Wilkin Ridge State #43-36-10-17 2135' FSL and 784' FEL NE SE Section 36, T10S - R17E Uintah County, Utah

Prepared For:

Gasco Production Company

By:

PERMITCO INC. 14421 County Road 10 Fort Lupton, CO 80621 303/857-9999

Copies Sent To:

- 2 Utah Division of Oil, Gas & Mining SLC, UT
- 1 Utah Division of State Lands SLC, UT
- 2 Gasco Production Company Englewood, CO



Application for Permit to Dim Gasco Production Company Wilkin Ridge State #43-36-10-17 2135' FSL and 784' FEL NE SE Section 36, T10S - R17E Uintah County, Utah

DRILLING PROGRAM

Page 1

The proposed wellsite is located on State Surface/State Minerals.

1. Estimated Tops/Geologic Markers

The estimated tops of important geologic markers are as follows:

Formation	Depth	Subsea
Uinta	Surface	+5,670'
Wasatch	4,515'	+1,155'
Mesaverde	8,485'	-2,815'
Castlegate	10,855'	-5,185'
Blackhawk	11,130'	-5,460'
Spring Canyon	11,915'	-6,245'
T.D.	12,150'	-6,480'

2. Estimated Depths and Names of Anticipated Water, Oil, Gas or Other Minerals Bearing Formations.

Substance	Formation	Depth
Gas	Mesa Verde	8,485'-10,855'
Gas	Blackhawk	11,130'-12,050'

3. Well Control Equipment & Testing Procedures

Gasco Production Company's minimum specifications for pressure control equipment are as follows:

Ram Type: 11" Hydraulic double, 5000 psi w.p.

Gasco will comply will all requirements pertaining to well control as listed in the Rule R649-3-7 of the Utah Division of Oil, Gas & Mining.

Page 2

The size and rating of the BOP stack is shown on the attached diagram.

4. Casing Program

The proposed casing program will be as follows:

Purpose	Depth	Hole Size	O.D.	Weight	Grade	Туре	New/Used
Conductor	0-170'	17-1/2"	13-3/8"	48#	H-40	ST&C	New
Surface	0-2,7881	12-1/4"	8-5/8"	32#	J-55	ST&C	New
Production	0-12,150'	7-7/8"	4-1/2"	13.5#	P-110	LT&C	New

Casing design subject to revision based on geologic conditions encountered.

5. Cement Program

Surface	Type and Amount		
TOC - Surface	Lead: 434 sx Hi-Lift@ 11 ppg, 3.91 yield Tail: 185 sx 10-2 RFC Cement @ 14.2 ppg, 1.63 yield. Cement will be circulated to surface.		
Production	Type and Amount		
TOC - 2,500'	Lead: 575 sx HI-Lift @ 11.5 ppg, 3.05 yield. Tail: 1034 sx 50/50 Poz 'G' @ 14.1 ppg, 1.28 yield.		

6. Drilling Fluids

The proposed circulating mediums to be employed in drilling are as follows:

Interval	Mud Type	Mud Wt.	Visc.	F/L	PH
0 - 3500'	Water	8.4			
3500' - T.D.	DAP Mud	9.0-11.2	30-40	15-20	7-8



7. Testing, Logging and Coring

The anticipated type and amount of testing, logging and coring are as follows:

- a. No drill stem tests are anticipated.
- b. The logging program will consist of a Schlumberger Platform Express from Base of Surface Casing to T.D.
- c. No cores are anticipated.

8. Anticipated Pressures and H₂S

a. No H₂S is expected. The maximum anticipated bottom hole pressure is 7076 psi.

9. Water Source

a. All water used for the drilling of this well will be purchased the Nebeker Water Station in Myton, UT. Permit No. 43-1723.

10. Other Information

- a. Drilling is planned to commence in October, 2004.
- b. It is anticipated that the drilling of this well will take approximately 35 days.
- c. Lining of the reserve pit will be done if deemed necessary by the Utah Division of Oil, Gas and Mining.
- d. At the end of drilling operations the location will be reclaimed and re-seeded as requested by the State of Utah.
- e. Surface Ownership

State of Utah



GASCO PRODUCTION COMPANY

WILKIN RIDGE STATE #43-36-10-17

LOCATED IN UINTAH COUNTY, UTAH SECTION 36, T10S, R171E, S.L.B.&M.

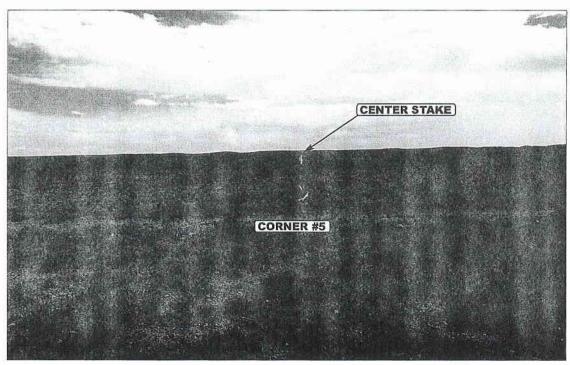


PHOTO: VIEW FROM CORNER #5 TO CENTER STAKE

CAMERA ANGLE: SOUTHEASTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS ROAD

CAMERA ANGLE: SOUTHERLY



Uintah Engineering & Land Surveying 85 South 200 East Vernal, Utah 84078 435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

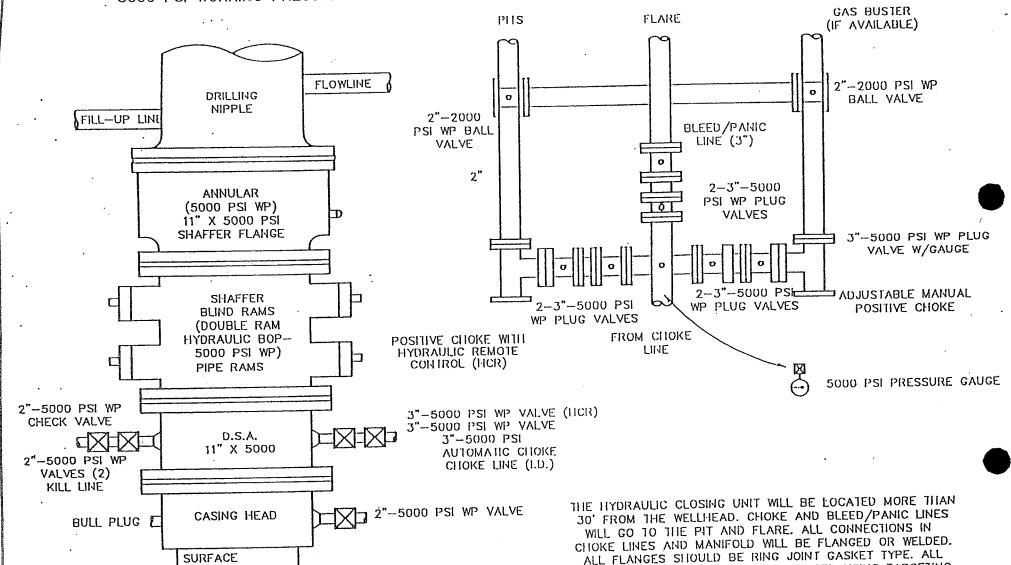
РНОТО

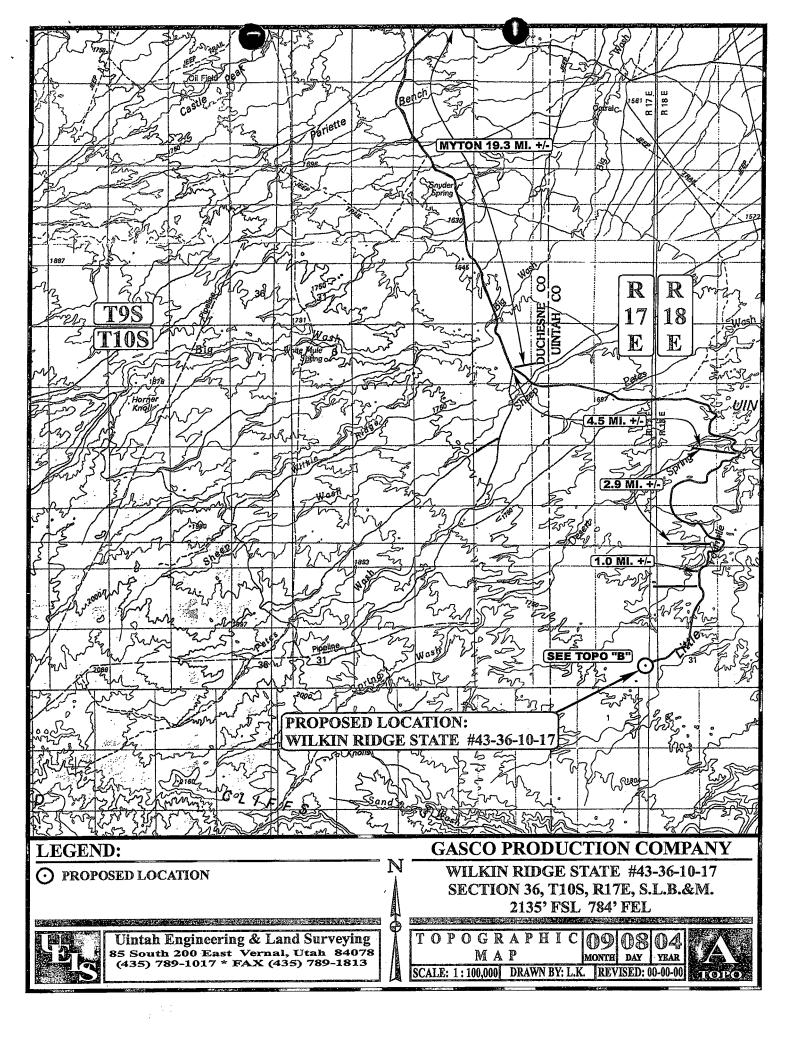
TAKEN BY:S.H. DRAWN BY: L.K. REVISED: 00-00-00

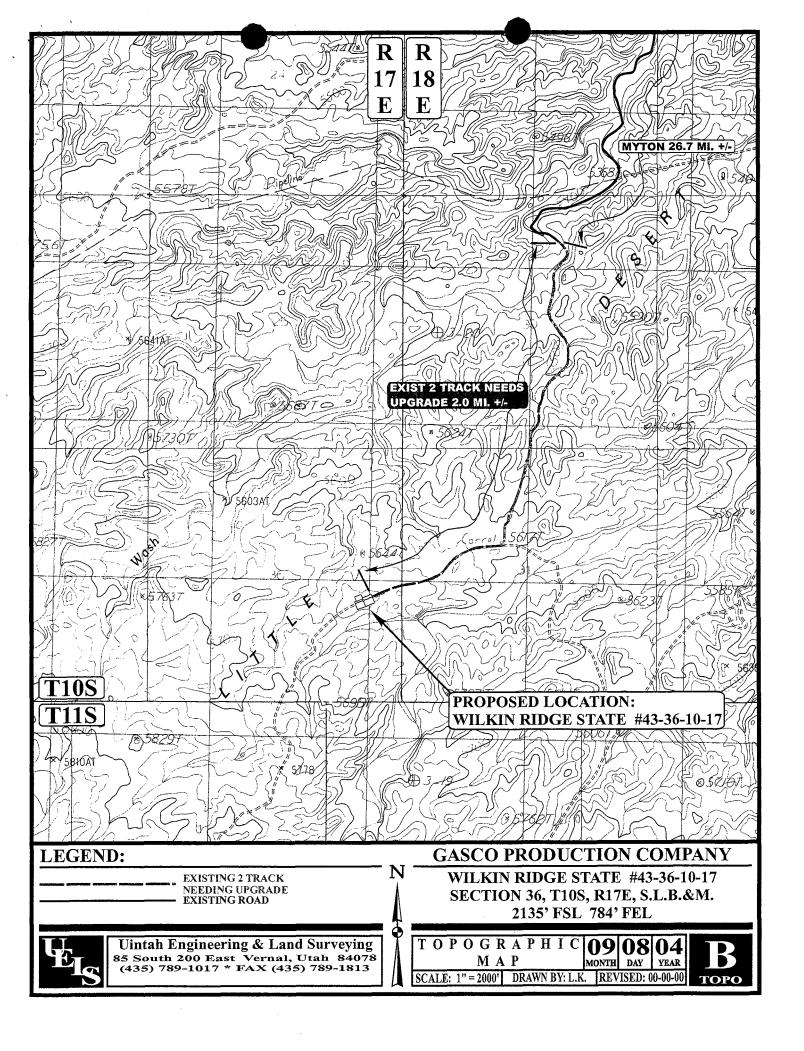
CASING

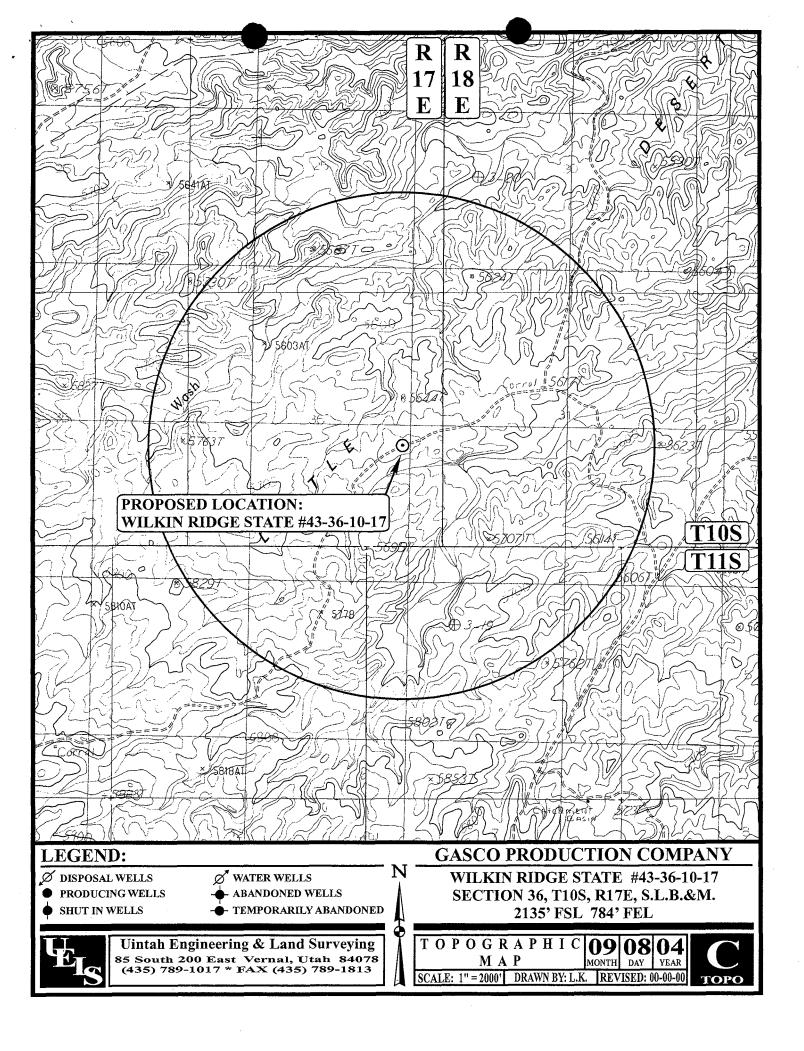
TURNS IN LINES SHALL BE CONSTRUCTED USING TARGETING

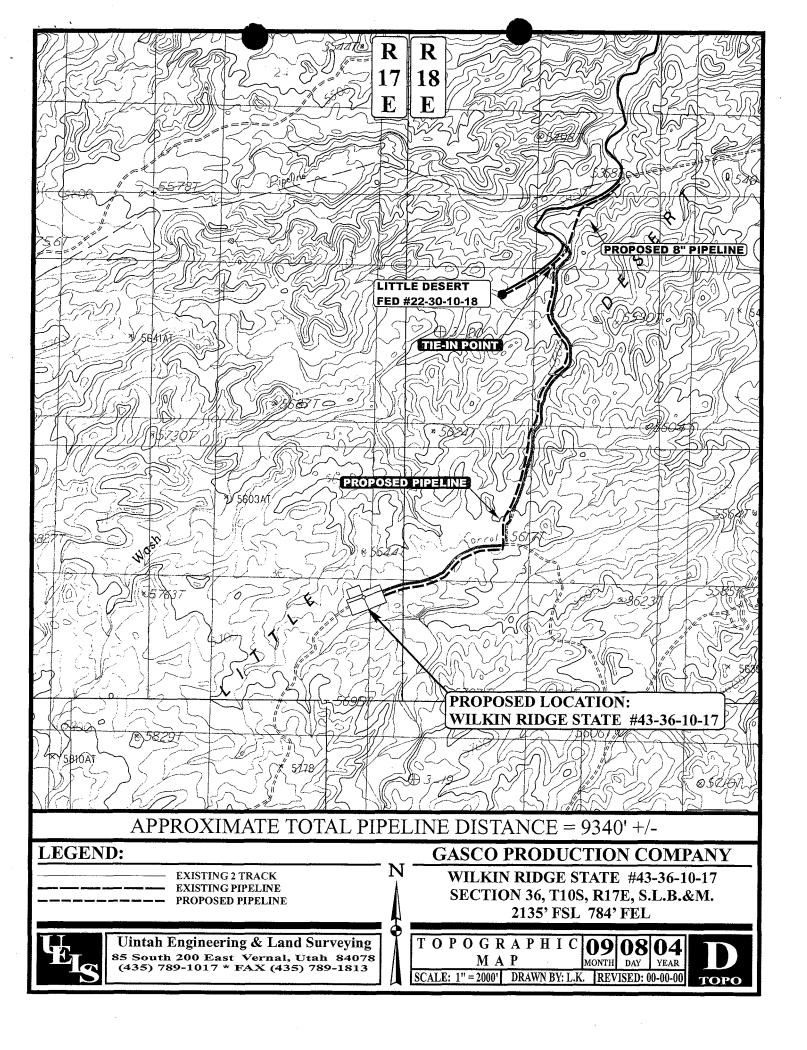
90' TEES OR ELLS. ALL LINES SHALL BE ANCHORED.

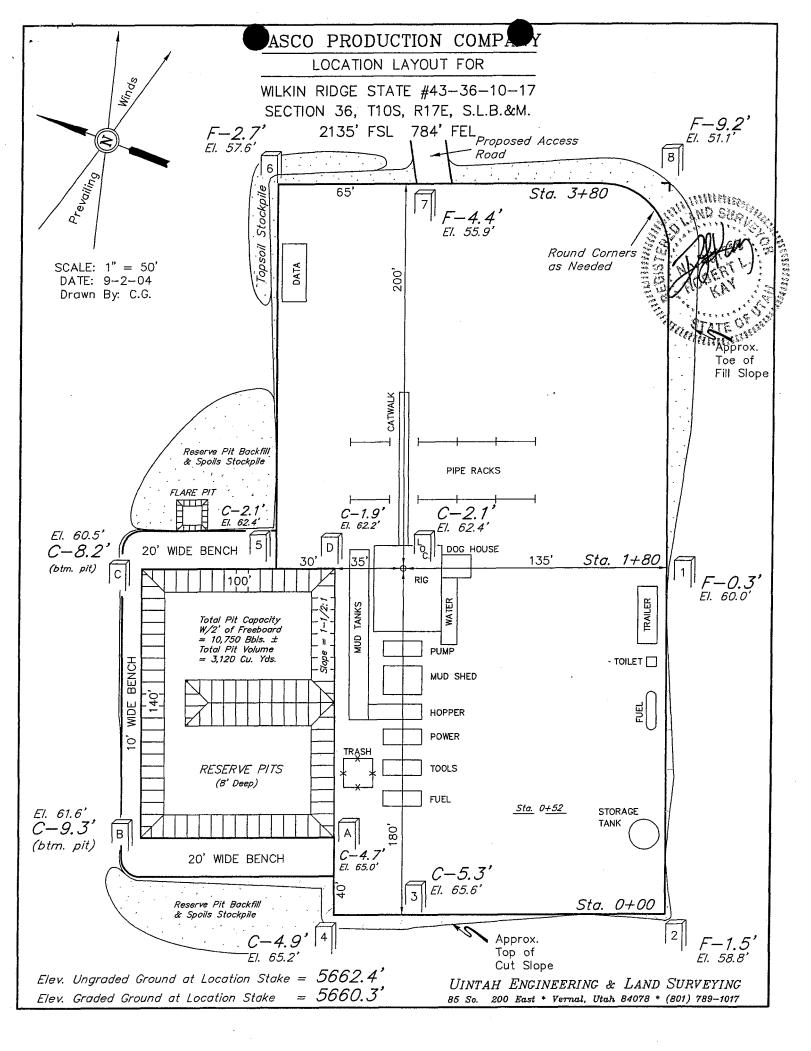


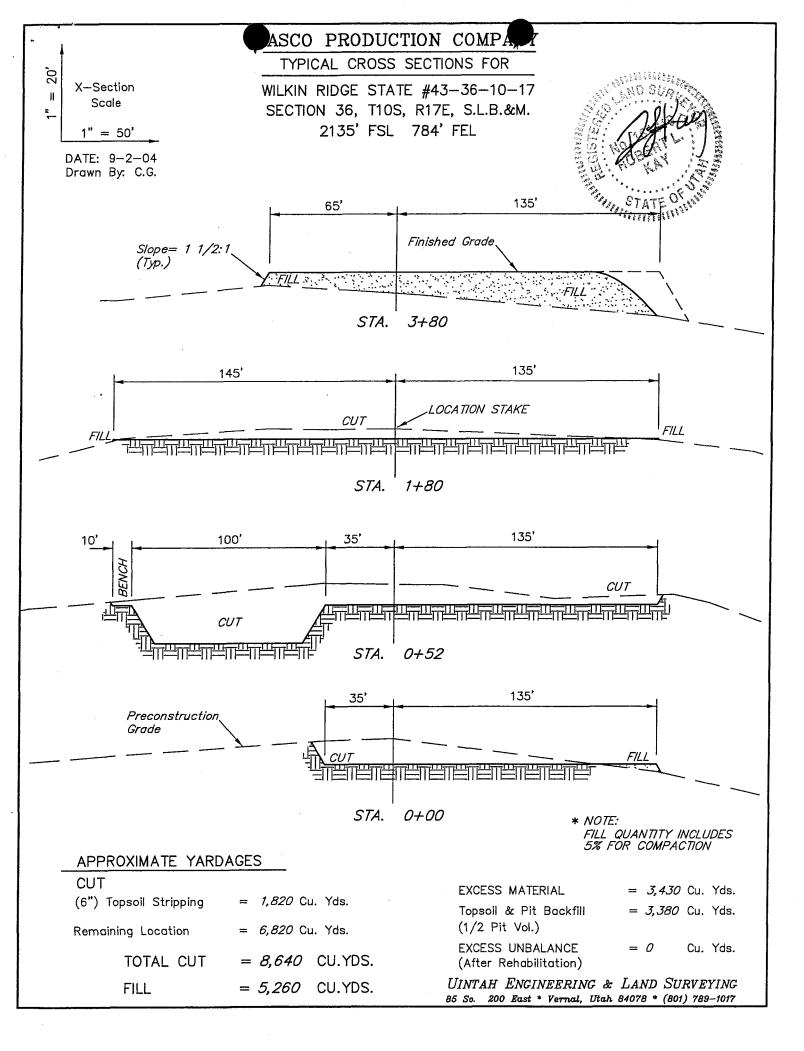












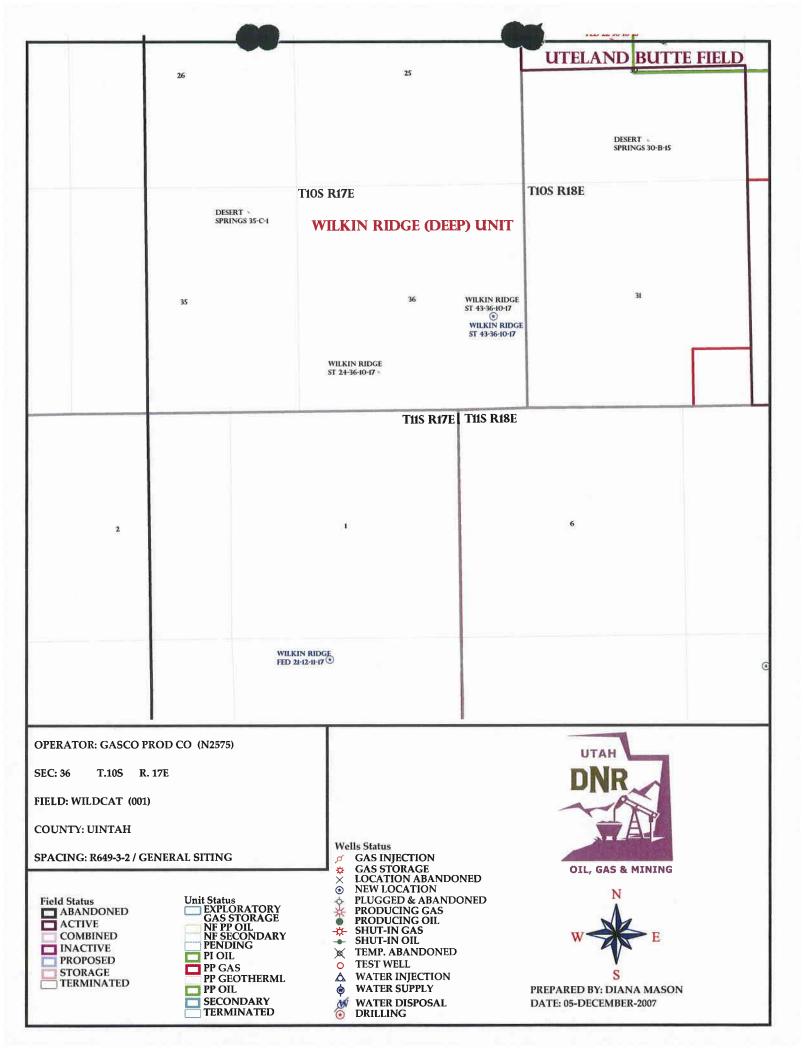


WORKSHEET



APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 12/03/2007	API NO. AS	SIGNED: 43-04	17-39796
WELL NAME: WILKIN RIDGE ST 43-36-10-17 OPERATOR: GASCO PRODUCTION (N2575) CONTACT: VENESSA LANGMACHER	PHONE NUMBE	R: 303-857-99	99
PROPOSED LOCATION:	INSPECT LOC	ATN BY: /	/
NESE 36 100S 170E SURFACE: 2135 FSL 0784 FEL	Tech Review	Initials	Date
BOTTOM: 2135 FSL 0784 FEL	Engineering	DRO	7/29/08
COUNTY: UINTAH LATITUDE: 39.89917 LONGITUDE: -109.9475	Geology		
UTM SURF EASTINGS: 589973 NORTHINGS: 4416886	Surface		
LEASE TYPE: 3 - State LEASE NUMBER: ML-47057 SURFACE OWNER: 3 - State	PROPOSED FOI COALBED METI	HANE WELL? NO	кнк
Plat Bond: Fed[] Ind[] Sta[] Fee[] (No. 04127763)	R649-3-3. Ex Drilling Unit Board Cause Eff Date: Siting:	E DEEP neral om Qtr/Qtr & 920' cception	
STIPULATIONS: 1. Spacing 2- Stagment	Shp Wot Basis	5	



Application for Permit to Drill

Statement of Basis

4/1/2008

Utah Division of Oil, Gas and Mining

Page 1

APD No

API WellNo

Status

Well Type GW

Surf Ownr S

CBM No

622 Operator 43-047-39796-00-00

GASCO PRODUCTION COMPANY

Surface Owner-APD

Field

Well Name WILKIN RIDGE ST 43-36-10-17 WILDCAT

Unit

WILKIN RIDGE DEEP

Type of Work

Location

NESE 36 10S 17E S 2135 FSL 784 FEL

GPS Coord (UTM) 589973E 4416886N

Geologic Statement of Basis

Gasco has proposed 170' of conductor and 2,788' of surface casing at the proposed location. Both are to be cemented to surface. The base of the moderately saline water is estimated to at approximately 3,700'. A search of Division of Water Rights records shows no water wells within a 10,000' radius of the proposed location. The surface formation at this location is the Uinta Formation. The Uinta Formation is made up of discontinuous sands interbedded with shales which are not expected to be prolific aquifers. The proposed casing and cementing program should adequately protect any useable sources of ground water.

Brad Hill

4/1/2008

APD Evaluator

Date / Time

Surface Statement of Basis

The predrill investigation of the surface was performed on March 26, 2008. Both the surface and the minerals are owned by S.I.T.L.A.. Jim Davis of S.I.T.L.A and Ben Williams of UDWR were invited to participate in this presite. Both were in attendance. Shon Mckinnon represented Gasco Production Co..

The location is in Duchesne, County approximately 24 miles straight-line distance southeast of Roosevelt, UT and 28.7 road miles southeast of Myton, UT. Access to the site is by State and County highways or roads and oilfield development roads. All existing roads are suitable for access. No new roads will be constructed.

The general area is referred to as the Little Desert. Topography is relative flat benches often broken with gently but sometimes steep draws. Desert Springs Wash is the primary drainage in the area. It drains into the Green River approximately 7 miles to the northeast. All drainages are ephemeral with no know springs or seeps in the immediate area. Occassional ponds constructed to store water for livestock and big game are in the area.

This specific site is located on top of a semi-flat ridge top, which slopes slightly to the southeast. It is bordered on the southeast at Corner 8 by a draw which breaks off moderately steep. This draw drains to the northeast and joins Desert Springs Wash. The selected location poses no surface problems for constructing a well pad, drilling and operating a well and appears to be the best location in the general area. The existing road runs through the location. It is an oilfield development road constructed by Gasco and currently dead-ends at a well to the south. Very light thru traffic will be routed thru the location.

Ben Williams of the Utah Division of Wildlife Resources stated the DWR classifies the area as critical yearlong range for antelope and yearlong range of limited value for deer. He did not recommend any restrictions and stated that no significant impact should occur to any wildlife species from drilling this well. Mr. Williams gave Mr. McKinnon and Mr. Davis copies of his wildlife evaluation and a DWR recommended seed mix to use for revegetating the site.

Floyd Bartlett

Onsite Evaluator

3/26/2008

Date / Time

Application for Permit to Drill Statement of Basis

Utah Division of Oil, Gas and Mining

Page 2

Conditions of Approval / Application for Permit to Drill

Category

Condition

Pits

4/1/2008

A synthetic liner with a minimum thickness of 16 mils with a felt subliner shall be

properly installed and maintained in the reserve pit.

Surface

The reserve pit shall be fenced upon completion of drilling operations.

Utah Division of Oil, Gas and Mining

Operator

GASCO PRODUCTION COMPANY

Well Name

WILKIN RIDGE ST 43-36-10-17

API Number

43-047-39796-0

APD No 622

Field/Unit WILDCAT

Location: 1/4,1/4 NESE

E **Sec** 36 **Tw** 10S

Rng 17E

2135 FSL 784 FEL

GPS Coord (UTM) 589974

4416885

Surface Owner

Participants

Floyd Bartlett (DOGM), Shon Mckinnon (GASCO), Ben Williams and Daniel Emmett (UDWR), Jim Davis (SITLA)

Regional/Local Setting & Topography

The location is in Duchesne, County approximately 24 miles straight-line distance southeast of Roosevelt, UT and 28.7 road miles southeast of Myton, UT. Access to the site is by State and County highways or roads and oilfield development roads. All existing roads are suitable for access. No new roads will be constructed.

The general area is referred to as the Little Desert. Topography is relative flat benches often broken with gently but sometimes steep draws. Desert Springs Wash is the primary drainage in the area. It drains into the Green River approximately 7 miles to the northeast. All drainages are ephemeral with no know springs or seeps in the immediate area. Occassional ponds constructed to store water for livestock and big game are in the area.

This specific site is located on top of a semi-flat ridge top, which slopes slightly to the southeast. It is bordered on the southeast at Corner 8 by a draw which breaks off moderately steep. This draw drains to the northeast and joins Desert Springs Wash. The selected location appears to pose no surface problems for constructing a well pad, drilling and operating a well. The existing road runs through the location. It is an oilfield development road constructed by Gasco and currently dead-ends at a well to the south. Very light thru traffic will be routed thru the location.

Surface Use Plan

Current Surface Use

Grazing

Recreational

Wildlfe Habitat

New Road

Miles

Well Pad

Src Const Material

Surface Formation

Λ

Width 280

Length 380

Onsite

UNTA

Ancillary Facilities N

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetland N

Flora / Fauna

A fair stand of Gardner saltbrush, shadscale, spiny hopsage, horsebrush, globe mallow, prickly pear, curly mesquite, cheatgrqass, broom snakeweed and shadscale exists.

Deer, elk, antelope, songbirds, chuckars, rodent, raptors, coyote, bobcats, cattle in the winter.

4/1/2008 Page 1

Soil Type and Characteristics

Moderately deep sandy loam with some shaley gravel.

Erosion Issues N

Sedimentation Issues N

Site Stability Issues N

Drainage Diverson Required N

Berm Required? N

Erosion Sedimentation Control Required? N

Paleo Survey Run? N

Paleo Potental Observed? N

Cultural Survey Run? Y

Cultural Resources? N

Reserve Pit

Site-Specific Factors		Site 1	Ranking	
Distance to Groundwater (feet)	>200		0	
Distance to Surface Water (feet)	>1000		0	
Dist. Nearest Municipal Well (ft)	>5280		0	
Distance to Other Wells (feet)	>1320		0	
Native Soil Type	Mod permeability		10	
Fluid Type	Fresh Water		5	
Drill Cuttings	Normal Rock		0	
Annual Precipitation (inches)	10 to 20		5	
Affected Populations	<10		0	
Presence Nearby Utility Conduits	Not Present		0	
		Final Score	20	1 Sensitivity Level

Characteristics / Requirements

The reserve pit is 100' by 140' located within a cut area on the on the northwest side of the location. It is 8 feet deep with a 10 foot wide bench. Stability should not be a problem. A 16 mil liner is required.

Closed Loop Mud Required? N Liner Required? Y Liner Thickness 16 Pit Underlayment Required? Y

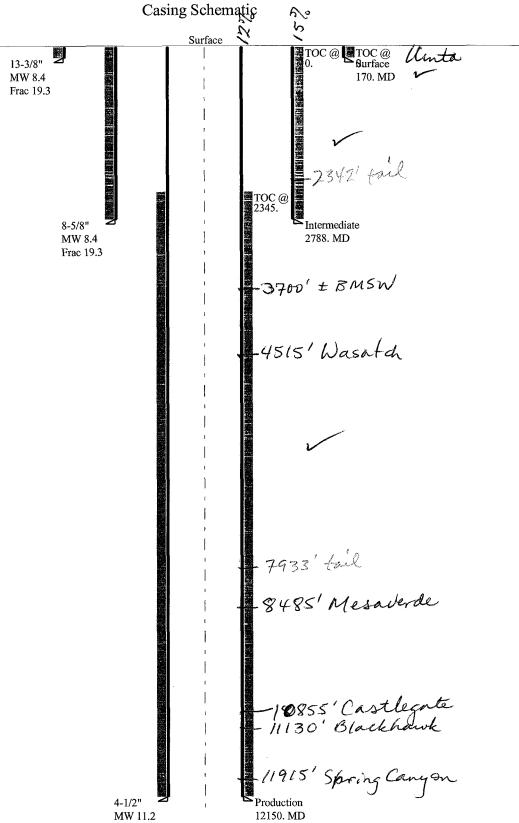
Other Observations / Comments

Floyd Bartlett **Evaluator**

3/26/2008

Date / Time

2008-04 Gasco Wilkins Ridge ST 43-36-10-17



Well name:

2008-04 Gasco Wilkins Ridge ST 43-36-10-17

Operator:

Gasco Production Company

String type:

Surface

Project ID:

43-047-39796

Location:

Uintah County, Utah

Design parameters:

Collapse

8.400 ppg Mud weight: Design is based on evacuated pipe.

Minimum design factors:

Collapse:

Design factor 1.125 **Environment:**

H2S considered? Surface temperature: No 65 °F

Bottom hole temperature: Temperature gradient:

67 °F

1.40 °F/100ft

Minimum section length:

150 ft

Burst:

Design factor

1.00

1.80 (J)

1.80 (J) 1.60 (J)

1.50 (B)

Cement top:

Surface

Burst

Max anticipated surface

pressure: 150 psi 0.120 psi/ft Internal gradient: Calculated BHP 170 psi

No backup mud specified.

Tension:

8 Round STC: 8 Round LTC: **Buttress:**

1.50 (J) Premium: Body yield:

Tension is based on buoyed weight. Neutral point: 149 ft

Non-directional string.

Re subsequent strings:

Next setting depth: Next mud weight:

2,788 ft 8.400 ppg 1,217 psi

Next setting BHP: Fracture mud wt: Fracture depth: Injection pressure:

19.250 ppg 170 ft 170 psi

Run Seq	Segment Length (ft) 170	Size (in) 13.375	Nominal Weight (Ibs/ft) 48.00	Grade H-40	End Finish ST&C	True Vert Depth (ft) 170	Measured Depth (ft) 170	Drift Diameter (in) 12.59	Internal Capacity (ft³) 149.9
Run Seq	Collapse Load (psi) 74	Collapse Strength (psi) 740	Collapse Design Factor 9.975	Burst Load (psi) 170	Burst Strength (psi) 1730	Burst Design Factor 10.18	Tension Load (Kips) 7	Tension Strength (Kips) 322	Tension Design Factor 44.99 J

Prepared

by:

Helen Sadik-Macdonald Div of Oil, Gas & Minerals Phone: (801) 538-5357 FAX: (801) 359-3940

Date: April 7,2008 Salt Lake City, Utah

Collapse is based on a vertical depth of 170 ft, a mud weight of 8.4 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:

2008-04 Gasco Wilkins Ridge ST 43-36-10-17

Operator:

Gasco Production Company

String type:

Intermediate

Project ID:

43-047-39796

Location:

Uintah County, Utah

Design parameters:

Collapse

Mud weight: 8,400 ppg Design is based on evacuated pipe.

Minimum design factors:

Collapse:

1.125 Design factor

Environment:

H2S considered?

No 65 °F

Surface temperature: Bottom hole temperature: Temperature gradient:

104 °F 1.40 °F/100ft

Minimum section length: 1,500 ft

Burst:

Design factor

1.00

1.80 (J)

1.80 (J) 1.60 (J)

1.50 (J)

Cement top:

Surface

Burst

Max anticipated surface

pressure: Internal gradient: Calculated BHP

2,175 psi 0.220 psi/ft 2,788 psi

No backup mud specified.

Tension:

8 Round STC: 8 Round LTC: Buttress:

> Premium: Body yield:

1.50 (B)

Tension is based on buoyed weight. Neutral point: 2,440 ft

Non-directional string.

Re subsequent strings:

Next setting depth: Next mud weight:

12,150 ft 11.200 ppg 7,069 psi

Next setting BHP: Fracture mud wt: Fracture depth: Injection pressure:

19.250 ppg 2,788 ft 2,788 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	2788	8.625	32.00	J-55	ST&C	2788	2788	7.875	954.1
Run Seq	Collapse Load (psi) 1217	Collapse Strength (psi) 2530	Collapse Design Factor 2.080	Burst Load (psi) 2788	Burst Strength (psi) 3930	Burst Design Factor 1.41	Tension Load (Kips) 78	Tension Strength (Kips) 372	Tension Design Factor 4.76 J

Prepared

by:

Helen Sadik-Macdonald Div of Oil, Gas & Minerals Phone: (801) 538-5357 FAX: (801) 359-3940

Date: April 7,2008 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 2788 ft, a mud weight of 8.4 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:

2008-04 Gasco Wilkins Ridge ST 43-36-10-17

Operator:

Gasco Production Company

String type:

Production

Project ID:

43-047-39796

Location:

Uintah County, Utah

Minimum design factors: **Environment:**

Collapse

11,200 ppg Mud weight: Design is based on evacuated pipe.

Collapse: Design factor

1.125

H2S considered?

No 65 °F

Surface temperature: Bottom hole temperature:

235 °F

Temperature gradient:

Non-directional string.

1.40 °F/100ft

Minimum section length: 1,500 ft

Burst:

Design factor

1.00

Cement top:

2,345 ft

<u>Burst</u>

Max anticipated surface

No backup mud specified.

pressure: Internal gradient:

Design parameters:

4,396 psi

Calculated BHP

0.220 psi/ft 7,069 psi

Body yield:

Tension:

8 Round STC: 1.80 (J) 8 Round LTC: 1.80 (J) 1.60 (J)

Buttress: Premium: 1.50 (J)

1.50 (B)

Tension is based on buoyed weight. Neutral point: 10,142 ft

Drift Nominal End True Vert Measured internal Run Segment Length Size Weight Grade **Finish** Depth Depth Diameter Capacity Seq (ft3) (ft) (in) (lbs/ft) (ft) (ft) (in) 1018.3 12150 3.795 4.5 13.50 P-110 LT&C 12150 12150 1 **Burst Tension Tension Tension** Collapse Collapse **Burst Burst** Run Collapse Strength Design Design Load Strength Design Load Strength Load Seq (psi) (psi) **Factor** (Kips) (Kips) Factor (psi) **Factor** (psi) 1 7069 10680 1.511 7069 12410 1.76 137 338 2.47 J

Prepared

by:

Helen Sadik-Macdonald Div of Oil, Gas & Minerals

Phone: (801) 538-5357 FAX: (801) 359-3940

Date: April 7,2008 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 12150 ft, a mud weight of 11.2 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

BOPE REVIEW

Gasco Wilkin Ridge ST 43-26-10-17 API 43-047-39796

INPUT		, , , , , , , , , , , , , , , , , , , ,			
Well Name	Gasco Wilkin Ridge ST 43-26-10-17 API 43-047-39796				
	String 1	String 2			
Casing Size (")	8 5/8	4 1/2			
Setting Depth (TVD)	2788	12150		4 1	
Previous Shoe Setting Depth (TVD)	160	2788			
Max Mud Weight (ppg)	8.4	11.2			
BOPE Proposed (psi)	10000	10000			
Casing Internal Yield (psi)	3130	12410			
Operators Max Anticipated Pressure (psi)	7076	11.2	ppg 🖊		

Calculations	String 1	8 5/8 "	
Max BHP [psi]	.052*Setting Depth*MW =	1218	
		BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	883 YES 🗸	
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	604 YES	
		*Can Full Expected Pressure, Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP22*(Setting Depth - Previous Shoe Depth) =	640 (NO NOEXPECTED Pressure	
Required Casing/BOPE Tes		2191 psi /	
*Max Pressure Allowed @ P		160 psi *Assumes 1psi/ft frac gradient	

Calculations	String 2	4 1/2	**		
Max BHP [psi]	.052*Setting Depth*MW =	7076			
		, , , , , , , , , , , , , , , , , , , ,	BOPE Ad	equate	For Drilling And Setting Casing at Depth?
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	5618	YE	ES 🗸	
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	4403		ES	
			*Can Full		cted Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe Max B	HP22*(Setting Depth - Previous Shoe Depth) =	5017	N	O K	-e-1019/K
Required Casing/BOPE Test Pressu	re	8687			
Max Pressure Allowed @ Previous Casing Shoe =		(2788	psi		*Assumes 1psi/ft frac gradient

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

December 5, 2007

Memorandum

To:

Assistant District Manager Minerals, Vernal District

From:

Michael Coulthard, Petroleum Engineer

Subject:

2007 Plan of Development Wilkin Ridge Unit,

Duchesne and Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2007 within the Wilkin Ridge Unit, Duchesne County, Utah.

API#

WELL NAME

LOCATION

(Proposed PZ Blackhawk)

43-013-33855 Wilkin Ridge Fed 31-30-10-17 Sec 30 T10S R17E 0704 FNL 2152 FEL 43-013-33856 Wilkin Ridge Fed 24-31-10-17 Sec 31 T10S R17E 0662 FSL 1978 FWL 43-013-33857 Wilkin Ridge Fed 22-31-10-17 Sec 31 T10S R17E 1969 FNL 1784 FWL 43-047-39796 Wilkin Ridge Fed 43-36-10-17 Sec 36 T10S R17E 2135 FSL 0784 FEL 43-047-39802 Wilkin Ridge Fed 32-21-10-18 Sec 21 T10S R18E 1816 FNL 2117 FEL

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

bcc: File - Wilkin Ridge Unit

Division of Oil Gas and Mining

Central Files Agr. Sec. Chron Fluid Chron

MCoulthard:mc:12-5-07

From:

Ed Bonner

To:

Mason, Diana

Date:

4/17/2008 2:55 PM

Subject:

Well Clearance

CC:

Davis, Jim; Garrison, LaVonne; Hill, Brad; Jarvis, Dan; Sweet, Jean The following wells have been given cultural resources clearance by the Trust Lands Administration:

Elk Resources, Inc

Ouray Valley State 36-11-5-19 (API 43 047 39641)

Gasco Production Company

State 42-32-9-19 (API 43 047 39795)

Wilkin Ridge State 43-36-10-17 (API 43 047 39796)

National Fuel Corporation

NFC Lindisfarne State 13-35 (API 43 047 39853)

Newfield Production Company

Monument Butte State F-36-8-16 (API 43 013 33862)

Gilsonite State L-32-8-17 (API 43 013 33864)

Beluga State 5-16T-9-17 (API 43 043 33865)

Parallel Petroleum Corporation

Tully State 15-13-5-22 (API 43 047 39310)

If you have any questions regarding this matter please give me a call.

From:

Diana Mason

To:

Brad Hill; Dustin Doucet

Date:

07/17/2008 2:22 PM

Subject:

Fwd: Well Control

Do either of you know this?

>>> <<u>VLLPermitco@aol.com</u>> 7/17/2008 2:20 PM >>> Diana,

Do you guys still need this info?

Venessa Langmacher

Permitco Inc. P.O. Box 99 Eastlake, CO 80614 303/857-9999 ext. 11 303/450-9200 fax

From: cwilson@gascoenergy.com

To: <u>VLLPermitco@aol.com</u>, <u>bwalker@gascoenergy.com</u> Sent: 7/17/2008 2:11:42 P.M. Mountain Daylight Time

Subj: RE: Well Control

Venessa,

Both these wells will have a single ram, mud cross, double ram and an annular. For both of these wells the BOP's will be 10K and the annular 5K. Let me know if you need anything else.

Chuck Wilson
Drilling Manager
Gasco Production Company

(O) 303-996-1801 (C) 720-530-1057

(e) <u>cwilson@gascoenergy.com</u> (mailto:cwilson@gascoenergy.com)

From: VLLPermitco@aol.com [mailto:VLLPermitco@aol.com]

Sent: Monday, April 07, 2008 11:21 AM To: Beverly Walker; Chuck Wilson

Subject: Well Control

Bev/Chuck,

The state called regarding the Gate Canyon 12-21-11-15 and the Wilkin Ridge 43-36-10-17. They are wanting to know what the well control will be for the Intermediate Casing. Can you get me some verbiage and I will pass it on?

Thanks!

Venessa Langmacher

Permitco Inc. 14421 County Road 10 Fort Lupton, CO 80621 303/857-9999 ext. 11 303/857-0577 fax

Planning your summer road trip? Check out _AOL Travel Guides_ $(\underline{\text{http://travel.aol.com/travel-guide/united-states?ncid=aoltrv0003000000016}}) \ .$

************Get fantasy football with free live scoring. Sign up for FanHouse Fantasy Football today.

(http://www.fanhouse.com/fantasyaffair?ncid=aolspr000500000000020)



Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

August 10, 2009

Gasco Production Company 8 Inverness Drive East, Ste. 100 Englewood, CO 80112

Re:

Wilkin Ridge State 43-36-10-17 Well, 2135' FSL, 784' FEL, NE SE Sec. 36,

T. 10 South, R. 17 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-39796.

Sincerely,

Gil Hunt

Associate Director

pab Enclosures

cc:

Uintah County Assessor

SITLA

Bureau of Land Management, Vernal Office



Operator:	Gasco Production Company				
Well Name & Number	Wilkin Ridge State 43-36-10-17				
API Number:	43-047-	39796			
Lease:	ML-47057				
Location: <u>NE SE</u>	Sec. 36	T. 10 South	R. 17 East		

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

The operator is required to notify the Division of Oil, Gas and Mining of the following action during drilling of this well:

- 24 hours prior to cementing or testing casing contact Dan Jarvis
- 24 hours prior to testing blowout prevention equipment contact Dan Jarvis
- 24 hours prior to spudding the well contact Carol Daniels
- Within 24 hours of any emergency changes made to the approved drilling program contact Dustin Doucet
- Prior to commencing operations to plug and abandon the well contact Dan Jarvis

The operator is required to get approval from the Division of Oil, Gas and Mining before performing any of the following actions during the drilling of this well:

- Plugging and abandonment or significant plug back of this well contact Dustin Doucet
- Any changes to the approved drilling plan contact Dustin Doucet

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voice mail message if the person is not available to take the call):

• Dan Jarvis at:

(801) 538-5338 office

(801) 942-0871 home

• Carol Daniels at:

(801) 538-5284 office

Dustin Doucet at:

(801) 538-5281 office

(801) 733-0983 home

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

Page 2 43-047-39796 August 10, 2009

- 4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.
- 5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)
- 6. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING					FORM 9			
				5.LEASE DESIGNATION AND SERIAL NUMBER: ML-47057				
SUNDF	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:							
Do not use this form for proposition bottom-hole depth, reenter plu DRILL form for such proposals.		7.UNIT or CA AGREEMENT NAME: WILKIN RIDGE DEEP						
1. TYPE OF WELL Gas Well				8. WELL NAME and NUMBER: WILKIN RIDGE ST 43-36-10-17				
2. NAME OF OPERATOR: GASCO PRODUCTION COMPAI	NY				9. API NUMBER: 43047397960000			
3. ADDRESS OF OPERATOR: 8 Inverness Dr. East, Suite 10	9. FIELD and POOL or WILDCAT: WILDCAT							
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2135 FSL 0784 FEL QTR/QTR, SECTION, TOWNSHI				COUNTY: UINTAH STATE:				
Qtr/Qtr: NESE Section: 36	Township: 10.0S Range: 17.0E Meridian	: S		UTAH				
11. CHE	CK APPROPRIATE BOXES TO INDIC	ATE N	NATURE OF NOTICE, REPORT	OR OTI	HER DATA			
TYPE OF SUBMISSION			TYPE OF ACTION					
,	☐ ACIDIZE		ALTER CASING		CASING REPAIR			
NOTICE OF INTENT Approximate date work will start: 7/10/2011	☐ CHANGE TO PREVIOUS PLANS		CHANGE TUBING		CHANGE WELL NAME			
7/10/2011	CHANGE WELL STATUS		COMMINGLE PRODUCING FORMATIONS		CONVERT WELL TYPE			
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN		FRACTURE TREAT		NEW CONSTRUCTION			
	☐ OPERATOR CHANGE		PLUG AND ABANDON		PLUG BACK			
SPUD REPORT	PRODUCTION START OR RESUME		RECLAMATION OF WELL SITE		RECOMPLETE DIFFERENT FORMATION			
Date of Spud:	REPERFORATE CURRENT FORMATION		SIDETRACK TO REPAIR WELL		TEMPORARY ABANDON			
			VENT OR FLARE		WATER DISPOSAL			
DRILLING REPORT Report Date:	☐ WATER SHUTOFF		SI TA STATUS EXTENSION	•	APD EXTENSION			
	WILDCAT WELL DETERMINATION		OTHER	отн	<u> </u>			
	OMPLETED OPERATIONS. Clearly show all p		E	,	Approved by the Jtah Division of I, Gas and Mining August 11, 2010			
NAME (PLEASE PRINT) Roger Knight	PHONE NUMBE 303 996-1803	R	TITLE EHS Supervisor					
SIGNATURE N/A			DATE 8/10/2010					



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047397960000

API: 43047397960000

Well Name: WILKIN RIDGE ST 43-36-10-17

Location: 2135 FSL 0784 FEL QTR NESE SEC 36 TWNP 100S RNG 170E MER S

Company Permit Issued to: GASCO PRODUCTION COMPANY

Date Original Permit Issued: 8/10/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not requ

uire revi	sion. Following is a	checklist o	of some items r	elated to the	applica	tion, w	nich should be	verified.
	nted on private land, ed? 🔵 Yes 🌘 N		wnership chan	ged, if so, ha	s the su	ırface a	greement beei	1
	any wells been drille requirements for th			oposed well No	which v	would a	ffect the spaci	ng or
	nere been any unit o s proposed well?		reements put i	n place that o	could af	fect the	permitting or	operation
	there been any char the proposed locati			ncluding owr	nership,	or righ	tof- way, whic	h could
• Has th	ne approved source	of water fo	or drilling chan	ged? 🔵 Ye	es 🗓 I	No		
	there been any phys e in plans from wha							uire a
• Is bor	nding still in place, v	vhich cove	rs this propose	d well? 🌘	Yes 🔵	No U	pproved by t tah Division , Gas and Mi	of
nature:	Roger Knight	Date:	8/10/2010					
Title:	EHS Supervisor Repr	esenting:	GASCO PRODUC	CTION COMPA	VY [Date:	August 11, 2	010
	•	_				A. W.	00,001	

Sig

Sundry Number: 17439 API Well Number: 43047397960000

	STATE OF UTAH		FORM 9		
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MININ	5.LEASE DESIGNATION AND SERIAL NUMBER: ML-47057			
SUND	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:				
	sals to drill new wells, significantly deepen exiguged wells, or to drill horizontal laterals. Use a		7.UNIT or CA AGREEMENT NAME: WILKIN RIDGE DEEP		
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: WILKIN RIDGE ST 43-36-10-17		
2. NAME OF OPERATOR: GASCO PRODUCTION COMPA	NY		9. API NUMBER: 43047397960000		
3. ADDRESS OF OPERATOR: 8 Inverness Dr. East, Suite 10	PHONE N 00 , Englewood, CO, 80112	NUMBER: 03 483-0044 Ext	9. FIELD and POOL or WILDCAT: WILDCAT		
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2135 FSL 0784 FEL			COUNTY: UINTAH		
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: NESE Section: 36	IP, RANGE, MERIDIAN: Township: 10.0S Range: 17.0E Meridian: S		STATE: UTAH		
11. CHE	CK APPROPRIATE BOXES TO INDICATE N	NATURE OF NOTICE, REPORT,	, OR OTHER DATA		
TYPE OF SUBMISSION		TYPE OF ACTION			
NOTICE OF INTENT Approximate date work will start: 8/10/2012 SUBSEQUENT REPORT Date of Work Completion: SPUD REPORT Date of Spud: DRILLING REPORT Report Date: 12. DESCRIBE PROPOSED OR CO	CHANGE TO PREVIOUS PLANS CHANGE WELL STATUS DEEPEN OPERATOR CHANGE PRODUCTION START OR RESUME REPERFORATE CURRENT FORMATION TUBING REPAIR WATER SHUTOFF WILDCAT WELL DETERMINATION DMPLETED OPERATIONS. Clearly show all pertine		CASING REPAIR CHANGE WELL NAME CONVERT WELL TYPE NEW CONSTRUCTION PLUG BACK RECOMPLETE DIFFERENT FORMATION TEMPORARY ABANDON WATER DISPOSAL ✓ APD EXTENSION OTHER: volumes, etc. Approved by the Utah Division of Oil, Gas and Mining 08/09/2011		
NAME (PLEASE PRINT)	PHONE NUMBER	TITLE			
Roger Knight SIGNATURE	303 996-1803	EHS Supervisor DATE			
N/A		8/9/2011			

Sundry Number: 17439 API Well Number: 43047397960000



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047397960000

API: 43047397960000

Well Name: WILKIN RIDGE ST 43-36-10-17

Location: 2135 FSL 0784 FEL QTR NESE SEC 36 TWNP 100S RNG 170E MER S

Company Permit Issued to: GASCO PRODUCTION COMPANY

Date Original Permit Issued: 8/10/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

 If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No
 Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes No
 Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No
 Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? Yes No
• Has the approved source of water for drilling changed? 🔘 Yes 📵 No
 Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No
• Is bonding still in place, which covers this proposed well? Yes No

Signature: Roger Knight **Date:** 8/9/2011

Title: EHS Supervisor Representing: GASCO PRODUCTION COMPANY



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

August 31, 2012

Gasco Production Company 8 Inverness Dr. East, Ste. 100 Englewood, CO 80112

Re:

APD Rescinded - Wilkin Ridge St 43-36 10-17, Sec. 36, T. 10S, R. 17E

Uintah County, Utah API No. 43-047-39796

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on August 10, 2009. On August 11, 2010 and August 9, 2011, the Division granted a one-year APD extension. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective August 31, 2012.

A new APD must be filed with this office for approval <u>prior</u> to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Environmental Scientist

cc: Well File

SITLA, Ed Bonner

